DOCUMENT RESUME

ED 112 558 EC 073 745

AUTHOR Bricker, Diane D.; Bricker, William A.
TITLE Non-Categorical Education for the Preschool Child.
PUB DATE [75]
NOTE 30p.; Not available in hard copy due to marginal legibility of original document

EDRS PRICE MF-$0.76 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Child Development; Curriculum; Educational Alternatives; Exceptional Child Education; Infancy; *Intervention; Maturation; Parent Education; Preschool Education; *Program Descriptions; *Regular Class Placement
IDENTIFIERS *Developmental Disabilities

ABSTRACT

Described is an innovative program of noncategorical education for both normal and developmentally delayed infants and preschool children. Focused upon are such aspects of program design and operation as early intervention, integration of delayed and nondelayed toddlers and preschoolers matched on the basis of developmental level rather than chronological age, parent involvement and education, and developmental programing. It is noted that the educational curriculum covers sensorimotor, motor, social and language development for infants, toddlers and preschoolers. Administration of the infant and parent training components are discussed, daily program activities for toddler and preschool classes are outlined, and the rationale for developmental programing is explained. (LH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED112558

Non-categorical Education for the Preschool Child

Diane D. Bricker

William A. Bricker

Mailman Center for Child Development

University of Miami

Miami, Florida

E 007345

BEST COPY AVAILABLE

Although day care and early intervention programs continue to be discussed from the perspective of whether or not they should exist (Highberger & Teets, 1974), this is clearly not an issue for many parents and professionals. Unless this country undergoes some dramatic reversals, day care and educational programs for preschool children will remain a part of our daily existence for several reasons which cannot be readily changed. First, statistics clearly indicate that more women are going back to full time employment for money if not simply liberation. The mothers in this working force need child care facilities. Second, much of the literature on the effects of early experience strongly suggests that developmental progress can be enhanced by providing children with a variety of experiences during the formative years (Hunt, 1961; Deneaberg, 1970). In order to provide these varied experiences many parents seek out play groups and educational programs for their young children. Finally, child advocates and handicapped children parents' groups have brought considerable lobbying and litigation pressure on many states to provide appropriate educational and social services for young handicapped children (Hobbs, 1974). The rationale for much of this legislation is that handicapped youngsters should be entitled to extra services to enable them to become productive, capable and happy contributors to society. These extra services often entail providing educational programs from birth onward (Gilmool, 1973). When one considers the needs of working mothers, current legislative moves in favor of the handicapped, and the desire by many parents for educational programs for their preschoolers, the issue becomes not whether, but how to establish quality day care and educational programs for both young handicapped and nonhandicapped children.

The literature on day care and early educational programs is extensive and can be classified into four convenient groups: a) laboratory school or demonstration programs often situated in colleges and universities, b) programs for the sensory handicapped child which have generated many training methods and procedures (Haring & Schiefelbusch, 1967), c) speech therapy and language training for the young speech deficient child which often includes autistic children or children with behavior disorders (Gray & Ryan, 1973; Berry, 1969; Lovaas, 1968) and d) programs for low-income preschoolers which have been probably the most extensively evaluated (Hodges & Spicker, 1967). Until recently the literature has contained relatively few descriptions of programs that have concentrated on infants and children under the age of three (Horton, 1974; Caldwell & Richmond, 1968). The lack of programs for young developmentally retarded children is particularly noticeable (Honig, 1973).

Almost by default one approach has been available to parents of developmentally retarded or delayed preschool-age children, that of having the child remain at home until the age of six when the options of special classes or institutionalization become available. Two classic studies on high risk and/or children with documented problems have suggested the benefit of early intervention with a population of children who have a substantial probability of having moderate to severe learning difficulties (Skeels & Dye, 1939; Kirk, 1958); however, the impact of these and similar investigations has been slow in coming. Only during the past five years have parents and professionals begun to recognize the need for early detection and subsequent intervention for

developmentally retarded children (W. Bricker & D. Bricker, 1974). Descriptions of early intervention programs for moderately to severely developmentally retarded preschoolers are now beginning to appear in the literature, lending optimism to the once dismal picture of early institutionalization (Shearer & Shearer, 1972; Olshin, 1971; W. Bricker & D. Bricker, 1973). The purpose of this article is to discuss an early intervention program that has provided a sizable group of parents and their children with a relatively atypical approach to the education of young normal and developmentally retarded children.

Early in 1970 an early intervention project was begun at the John F. Kennedy Center for Research on Education and Human Development of Peabody College for a number of toddlers who were evidencing developmental problems or who were at high risk for developing such problems (e.g., Down's syndrome, hydrocephalus, premature). From the project's inception the staff felt that the program ought to be an innovative approach to the education of young handicapped children. Consequently, we implemented several important decisions which have served as the keystones of the project during the past four years (D. Bricker & W. Bricker, 1971; 1972; 1973). First, although we were convinced that the environment needed to provide more than concerned care for the children; we chose to begin with a relatively undemanding structure knowing that more structure could be imposed as necessary. The form that this structure assumed is developmental programming. Second, like Schaefer (1972) we deemed parental involvement in the project to be critically important. Third, we believed that maximum benefit for the handicapped child could be achieved only if they were included

in the program before age two. Finally, we decided to attempt to provide the most normal environment possible for the handicapped children. To accomplish this we proposed a new and unique approach--the integration within the same classroom of an equal number of normal developing children (nondelayed) with an equal number of children with developmental problems (delayed). The remainder of this article expands and details these four operating tenets with special emphasis on the integration of the delayed and nondelayed children.

During the first year of the program we offered a morning program for ten children and an afternoon program for the same number of children. This initial group was composed of 11 children with developmental delays, and 9 children who were from all appearances nondelayed. During the initial year of the project, finding parents of nondelayed children who were willing to place their child in a program that also included handicapped children was not easy. Many parents who were eager to have their toddler enrolled in an educational program quickly changed their mind when they learned that handicapped children would be integrated into the same classroom. We were asked often during that first year why we chose to place delayed and nondelayed children in the same program. Our answers generally covered three areas which are discussed below.

Although "mainstreaming" is now a somewhat common term in education and special education, four years ago the concept of normalization as described by Wolfensberger (1972) was new. The idea behind normalization is that every child should be entitled to live the most "normal-like" existence possible. That is any child who can function in a regular

public school class should remain there. A child who can be maintained in the regular school program by providing a special support teacher should remain in a regular class rather than be isolated in a self-contained classroom. Only children who cannot function appropriately in a regular education program should be removed to self-contained special classes and finally only those few exceptional individuals who cannot be maintained in the community be institutionalized (Hobbs, 1974). The concept of "mainstreaming" which now has legislative support in many states provides the maximum opportunity for handicapped children to interact with normal developing peers thus providing the atypical child with a more normal environment than programs that only include children with problems. The preschool years would seem to be an ideal time to begin "mainstreaming."

The integration of delayed and nondelayed children into the same program produced an unexpected outcome. Not only have the children had the opportunity to explore and learn about each other but also the parents of nondelayed youngsters have had the chance to interact closely with parents of children who have moderate to severe problems. This interaction has the potential of being an enlightening experience for parents. An often heard comment by mothers in our project is that they had a real fear of or great uncertainty about handicapped children as they entered their child in the program. Their experiences in the project quickly changed fear to calm once they realized that handicapped children are basically much like other children. In a sense the close interaction between parents has allowed for communication which we believe has been important in terms of educating a wide variety of people about developmental difficulties.

Finally, the research by Bandura and others has suggested strongly that children do imitate behavior that produces observable reinforcing environmental contingencies (Bandura, 1967). Perhaps one of the most effective ways for a young delayed child to learn a new functional response is to observe the occurrence of that response in another child. For example, by watching a nondelayed youngster drag a chair to the water fountain to get a drink and succeed, the delayed child may be able to imitate the response. This imitation should result in acquiring the desired water plus the independence of not having to ask the teacher or parent for assistance. Thus we became committed to the idea of trying to build a program that could integrate children with a variety of problems and skills without interfering with the developmental progress of any individual child. To substantiate this approach we used two methods. First, we have assessed the performance of the nondelayed children in a number of areas such as motor, sensorimotor, and language. Second, we have administered standardized tests of intelligence (D. Bricker & W. Bricker, 1971; 1972; 1973). All this information indicates that the normal children do not develop problems as a function of associating with children who have moderate to severe learning difficulties. However, it should be emphasized that the children are not placed into the various classrooms in a random fashion. Indeed we do not recommend that children of widely disparate developmental levels be placed in the same classroom. The delayed and nondelayed children included in our program are matched on the basis of developmental level with little attention given to chronological age; consequently, the nondelayed children are generally one- to one-and-a-half years

younger than the delayed children in the same class. The matching of children on general developmental level is, we believe, extremely important if the class is to function as a group and if the children are to learn from each other. A busy, active two-year-old who is learning to run and to produce sentences may have little to offer a nonambulatory child who has yet to learn how to control his head movements. However, this same two-year-old may be able to serve as an excellent model for and to interact effectively with a three-year-old Down's syndrome child who is also learning to utter words and move about the classroom.

The second source of support for the integration of the classroom comes directly from the parents of the children involved in the project. As mentioned previously, finding normal children to participate in the project during the initial year was difficult. At the termination of year one, we asked all parents to anonymously fill out a questionnaire concerning the integration of the delayed and nondelayed children. All eight of the parents of the nondelayed children who returned the questionnaire indicated they felt their nondelayed child had not suffered any negative effects from the integration and all were willing to place their child in the program again. All 11 parents of the delayed children responded that they felt the integration had a positive effect and they would choose to place their child in an integrated program over one composed of only delayed children (D. Bricker & W. Bricker, 1971). Following the termination of the second year of the program, the questionnaires were administered again. Two of the 12 parents of the nondelayed children indicated that perhaps their child had picked up some undesirable response from the delayed children;

however, all 12 parents of the nondelayed children requested that their children be allowed to return to the program the following year. We felt that this extremely positive response by parents was important because the success of this approach is largely dependent upon parental willingness to support the concept of integration. Finding nondelayed children to participate in the project during the third and fourth years has been no problem. In fact, we have many more requests by the parents of nondelayed children than we can possibly accommodate which suggests that at least locally this project has become an accepted educational program for young children.

One final bit of information which indicates that integration may be a workable approach is that after spending a year in the Infant, Toddler and Preschool Research and Intervention Project, two nondelayed and three delayed children were included in a demonstration preschool program for low-income children. Although the director of this program agreed to enroll these five children, the social worker and the teaching staffs handled the mechanics of shifting the children from one program to the other. The director requested that he not be told which children came from the integrated program, and he often tells visitors he cannot distinguish four of these children from the remaining 15 children in the program. The fifth child was already known to the director through a previous interaction.

The population of this project has almost tripled during the third and fourth years of its existence. The expansion occurred through the use of Title IV-A funds made possible by the combined support and cooperation of the Tennessee Department of Public Welfare, the Tennessee

Department of Mental Health and the Joseph P. Kennedy, Jr. Foundation. Transportation provisions provided by these funds have made it possible to include children from low-income areas; consequently, the current population of children covers a broad developmental and economic range. The project is currently composed of a classroom, parent advisory, research and training and demonstration components. Although these components are described in detail elsewhere (D. Bricker & W. Bricker, 1971; 1972; 1973), it seems appropriate to discuss the changes in the classroom component that have been mandated by our basic philosophy. The project currently operates three distinct but linked classroom programs. These units are discussed below in the context of early intervention, developmental programming and parental involvement which are the remaining three keystones of this Project.

A program for toddler age children initially seemed to meet the requirements of early intervention but after two years of observing young developmentally delayed children we became convinced that intervention for these youngsters should begin in early infancy. Intervention during infancy is particularly appealing if one accepts the developmental position of Piaget:

> The establishment of cognitive or more generally, epistemological relations, which consist neither of a simple copy of external objects nor of a mere unfolding of structure performed inside the subject, but rather involve a set of structures progressively constructed by continuous interaction between the subject and the external world (Piaget, 1970, p. 703).

Piaget has repeatedly discussed two powerful theoretical positions that if accepted would lead naturally to intervention with infants. First, as stated in the above quote the child learns from active interaction with his environment; consequently, the structure of a child's environment is extremely important if that child is to make developmental progress. Often parents at home simply do not know or have the confidence to use the appropriate strategies for influencing the growth of a handicapped child. Second, Piaget believes that later more complex forms of behavior are developed from early response forms. In his view earlier processes such as primary and secondary circular reactions are prerequisite to the acquisition of cognitive skills that occur in later stages of the sensorimotor period which in turn are prerequisite to concrete operations from which develop formal operations (Piaget, 1970). Bricker and Bricker (1974) are convinced that the sensorimotor period provides the basis for subsequent language development as well as other more complex forms of behavior. If this position can be empirically validated then early training is crucial to the acquisition of complex cognitive processes. These two theoretical positions provided the rationale for the development of our three intervention units.

The infant unit contains approximately 23 babies ranging in developmental level from 5 to 16 months as can be seen in Table 1. This unit focuses on high risk or children with documented problems. For example the current population is composed of eight children with Down's syndrome, three children with documented birth injury, two children with genetic abnormalities and four normal-at risk children (e.g., baby with a fractured skull at three months, baby from a large family all of

TABLE 1

Demographic Information on Children in the Infant, Toddler and Preschool Research and In

	Infant Unit	Toddler Unit	Preschool Unit
N	23	28	27
CA (in months)			
Mean	22	36	56
Range	5-43	21-50	43-76
Sex			
Male	9	16	18
Female	14	12	9
Race			
Black	6	5	9
White	16	22	17
Other	1	1	1
Economic Level[a]			
Upper	1	6	4
Middle	8	9	8
Lower	14	13	15
IQ[b]			
Delayed (N=33)			
Mean	49 (N=11)	55 (N=12)	50 (N=10)
Range	28-64	36-68	32-63
Nondelayed (N=41)			
Mean	91 (N=8)	109 (N=16)	94 (N=17)
Range	72-119	71-135	70-145

TABLE 1

tion on Children in the Infant, Toddler and Preschool Research and Intervention Project

Infant Unit	Toddler Unit	Preschool Unit	Total
23	28	27	78
22 5-43	36 21-50	56 43-76	39 5-76
9 14	16 12	18 9	43 35
6 16 1	5 22 1	9 17 1	20 55 3
[illegible] 8 14	6 9 13	4 8 15	11 25 42
49 (N=11) 28-64	55 (N=12) 36-68	50 (N=10) 32-63	52 28-68
91 (N=8) 72-119	109 (N=16) 71-135	94 (N=17) 70-145	99 70-145

TABLE 1 (cont.)

	Infant Unit	Toddler Unit	Preschool Unit
Etiology[c]			
Down's syndrome	8	8	9
Brain injury	3	0	1
Suspected genetic disorder	2	1	0
General delay	4	2	1
Autistic-like	1	1	2
Physically handicapped	1	0	0
Multiple handicapped	0	0	0
Normal - at risk	4	6	5
Normal	0	9	9

[a]The Upper category refers to families whose income exceeds $12,000 per year.
The Middle category refers to families whose income is between $6000 and $12,000 per yea
The Lower category refers to families whose income is less than $6000 per year.

[b]The Delayed category refers to children who score below 70 on standardized intelligence
The Nondelayed category refers to children who score above 70 on a standardized intellig
Four infants have not been tested.

[c]Normal-at risk refers to children who score above 70 on a standardized intelligence test
have additional factors in their environment that would make educational problems a hig
General delay refers to children who score below 70 on a standardized intelligence test
no specific etiology has been isolated.

TABLE I (cont.)

Infant Unit	Toddler Unit	Preschool Unit	Total
8	8	9	25
3	0	1	4
2	1	0	3
4	2	1	7
1	1	2	4
1	0	0	1
0	0	0	1
4	6	5	15
0	9	9	18

to families whose income exceeds $12,000 per year.
to families whose income is between $6000 and $12,000 per year.
to families whose income is less than $6000 per year.

s to children who score below 70 on standardized intelligence tests.
fers to children who score above 70 on a standardized intelligence test.
tested.

hildren who score above 70 on a standardized intelligence test but who
n their environment that would make educational problems a high probability.
ildren who score below 70 on a standardized intelligence test but for whom
been isolated.

whom are educationally retarded). No baby with a normal past history is included in this unit. This program accommodates babies on either an all day, half day or once a week basis. The primary emphasis is the acquisition of sensorimotor skills in order to prepare the baby to move into the toddler unit. If possible the two teachers that operate this classroom, train the mother and/or father to work with their baby rather than working directly with the baby themselves. Unfortunately, this is not always possible since many of our children come from low-income or middle-income backgrounds in which both parents must work. In other families the mother may have several other preschoolers at home. A few parents are extremely limited themselves or are unable to work effectively with their moderately to severely developmentally delayed child. Parents with this variety of needs mandate a flexible program.

Our parent training program has not always been flexible, but we have learned through a variety of experiences that parents require as much individual programming as children. Treating parents as a homogeneous group when they vary from having advanced academic degrees to those who spent their childhood and youth in one of the state residential facilities for the mentally retarded obviously will not work. During the first two years of the project the parent training and advising was carried out by the research and teaching staff. Although these people were qualified and appropriate for the roles of parent advisors, they were unable to spend adequate time with the parents. During the third year we were able to create a parent advisory unit composed of three full time advisors, a social worker and a part-time coordinator.

The primary responsibilities of this component are: a) to help parents become effective educational change agents with their child, b) to assist parents in becoming educated consumers of programs and materials offered as services for their children, c) to offer services for those families with special needs (e.g., help in acquiring food stamps, obtaining proper medical and dental services for a child, special counseling services, etc.) and d) to coordinate educational activities of the home and the classroom.

The majority of parent education has focused on language, motor, sensorimotor and social areas which also form the core classroom curriculum. Initially parents are trained in the use of behavior management skills as prerequisite to working in the curriculum areas. Training is generally conducted in small group sessions; however, when a parent has a special or particularly difficult problem, the parent advisor may shift to individual sessions. Video tapes are made of the parent training his child which then serve as the focal point for helping the parent improve his training skills. The use of video replay appears to be an effective teaching strategy to employ with parents (Filler, 1974). Consumer education is carried out by exposing parents to appropriate films, books and other printed matter, informing them about organizations that are concerned with providing education and services for young children and by arranging meetings with local, state and national personnel who are in decision-making positions. For example, the director of the special education department in the local public schools has attended two parent meetings expressly to answer questions about what type of services would be available to their children

in the future. The parents have also had the opportunity to question representatives of the Joseph P. Kennedy, Jr. Foundation, a member of the President's committee on Mental Retardation, officials of Tennessee's State Department of Education as well as individuals associated with other early intervention programs. All of these interactions are designed to provide the parent with knowledge about issues which directly concern their child's education. Special services are offered through a variety of mechanisms from holding evening meetings for fathers who cannot attend the program during the day to helping a mother learn to read. The primary objective of these special services is to help families move from crisis existences to more stable environments and predictable lives by learning to anticipate trouble-producing events and developing strategies for meeting these events. For example, the family who repeatedly runs out of food can be helped to develop a strategy for spacing food usage across the month as well as locating other food sources such as government surpluses. The final responsibility of the parent advisory component is the coordination of training activities conducted in the classroom and at home. The parent advisors and the teaching staff must share information in order for both components to function effectively. The parents should not be working at cross purposes with the classroom program; no more than classroom training should be disrupting parental goals. This brief description of the parent training component hopefully has indicated our concern for parental involvement and the need for flexibility in this involvement.

The toddler classroom was the original program and offers two and one half hour morning and afternoon programs for children who range

developmentally from approximately one and a half to three years. We chose this format for two specific reasons. First, offering two half day programs allows a well trained staff of educators to serve twice as many children and second, this program avoids activities such as meals and napping that can be in many instances better done at home by the parent. Children who need day care are bussed from our project to neighboring day care centers. We believe this format allows more functional use of an educational setting which is important since adequate programs for young handicapped children and their parents are scarce. Half of the 30 toddlers in the project attend the morning session while the remainder come in the afternoon. As seen in Table 1 this population of children currently includes 12 delayed and 16 nondelayed children. The toddler unit is staffed by two teachers with assistance from practicum students. The focus is on programming in the areas of language, social, sensorimotor and motor development. Although the teachers in this unit work directly with the children, the parents are trained simultaneously by the parent advisors to develop similar skills in order to maximize the generalization of the classroom training to the home and other environments. The preschool unit is an upward extension of the toddler unit and the morning and afternoon program format is maintained. The children in this classroom range developmentally from approximately three to four years and includes 10 delayed, and 17 non-delayed children. The program in this classroom imposes more structure on the children than is found in the infant or toddler classes with the emphasis upon acquiring appropriate language and social skills. Again this unit is staffed with two teachers plus various practicum students.

An outline of the daily program activities for the toddler and preschool classes are presented below.

Opening Group Time — Morning 9:09-9:15 Afternoon 1:00-1:15

Children arrive and seat themselves in a semicircle.

Teacher greets child seated next to her and requests that child greet the child next to him by name, continue until everyone is greeted.

Activities for this period may include feltboard, matching games, discrimination exercises, and imitation songs or games.

Children are directed to appropriate small group for next activity.

Skill-building Time — Morning 9:15-9:30 Afternoon 1:15-1:30

During this time children will be encouraged to work with quiet individual tasks such as puzzles, form boards, etc. Selection of the task will be based on both the child's interest and developmental level.

Programs — Morning 9:30-11:00 Afternoon 1:30-3:00

Each teacher takes individuals or small groups to the assigned area and begins work on programs such as language, gross motor, self-help.

When the first group is finished, tell the children they may play; find the children in the next group, take them to the assigned area and begin on the program.

Continue with each group on the schedule until all children have been through their individual programs.

Activities include: matching, discrimination, naming and imitative tasks, or building of other cognitive and language skills.

Free Play Morning 9:30-11:00 Afternoon 1:30-3:00

(For children when not involved in a program)

Help a child to find a toy--prompt if he does not or suggest an activity--slide, boat, housekeeping.

Move around the room giving attention to each child.

Art or Fine Motor Activities

After returning from previous activity, children are directed to chairs.

Children are given various activities designed to develop fine motor coordination.

Activities during this period include: stringing beads, placement of pegs in pegboard, painting or drawing and use of scissors.

Story Time or Quiet Games

Children sit together to hear a story or play a game.

Gym Time or Outside Morning 11:00-11:30 Afternoon 3:00-3:30

Announce that it is time to put away toys and go to the gym or playground.

Prompt children to pick up toys and put them away.

Have children gather at door.

When leaving the room have one teacher go first, one teacher help slow-walkers, and one teacher check to make sure that all children get to the gym.

Activities in the Gym or Outside

Riding tricycles and any non-pedal toys

Playing with balls

Jumping and rolling on mats

Running

Games (Ring around the roses)

As a general strategy the children will be encouraged to participate in a group game which has as a targeted objective the practice of some gross motor skill, after which free play will be encouraged.

Snack Time Morning 11:30-11:45 Afternoon 3:30-3:45

Seat children in chairs.

Elicit appropriate responses from each child before giving him his snack.

Snack time will be used to practice self-help feeding and drinking as well as stimulating expressive language.

Closing Group Time Morning 11:45-12:00 Afternoon 3:45-4:00

Review day's activities.

Sing songs or play imitation games.

Say good-bye.

The daily schedule provides opportunities for children to participate in a variety of activities and social situations.

The educational curriculum covers the four areas of language, sensorimotor, social and motor development for all three classroom units. These four areas have been mapped out from the beginning stages to the terminal states using the principles of developmental programming. Developmental programming assumes that in the acquisition of a particular skill or

process there is a beginning point when the response is not there, a termination point when the response becomes part of the child's repertoire and an in-between sequence of relevant related activities. A second assumption is that most efficient learning will occur if the training between the beginning and termination point follows the appropriate developmental sequence (W. Bricker, 1970). Before training a specific skill the child needs to have the prerequisite behavior for acquiring that skill. For example, attempting to train a child in verbal imitation is probably inefficient, and frustrating to the child if he cannot first focus on the face of the trainer for a suitable period of time, imitate gross and fine motor activities and auditorily discriminate one sound from another. Focusing on the face, motor imitation and auditory discrimination are probably prerequisite skills to verbal imitation and the teacher should make sure the child has these skills before beginning training on verbal imitation. Although we are fully aware that future research may suggest more appropriate training models, we believe that, at present, the most efficient and effective training sequences are generated using the developmental model. The teaching and research staff have concentrated much effort on building the developmental curriculum used in the infant, toddler and preschool classrooms, and although we are far from the final solutions to the training of young children, strategies such as developmental programming provide excitement and impetus for future developments in education.

The purpose of this paper has been to discuss an intervention program based on the rationale of early intervention, integration of

delayed and nondelayed children, parental involvement and developmental programming. One of the primary goals of this project has been to demonstrate that viable alternatives to traditional preschool education exist, especially for young developmentally delayed children. Preschool education has suffered too long from a variety of constrictions that have legislated the type and age of children to be served, teacher approach and general educational content that is or is not appropriate. Preschool programs for low income children have rocked many of these traditional notions and the field of early childhood education is now ready for a variety of new and exciting approaches.

Acknowledgements

Support for the service component of the Infant, Toddler and Preschool Research and Intervention Project are provided by the Joseph P. Kennedy, Jr. Foundation, the Tennessee Department of Mental Health and Public Welfare. The writer wishes to thank John Filler, and Richard Iacino for their thoughtful criticism and helpful suggestions in the preparation of this manuscript.

References

Bandura, A. The role of modeling processes in personality development. In W. Hartup & N. Smothergill (Eds.), The young child: Reviews of research. National Association for the Education of Young Children, 1967.

Berry, M. F. Language disorders of children. New York: Appleton-Century-Crofts, 1969.

Bricker, D. D., & Bricker, W. A. Toddler Research and Intervention Project Report: Year I. IMRID Behavioral Science Monograph No. 20, Institute on Mental Retardation and Intellectual Development, George Peabody College, Nashville, Tenn., 1971.

Bricker, D. D., & Bricker, W. A. Toddler Research and Intervention Project Report: Year II. IMRID Behavioral Science Monograph No. 21, Institute on Mental Retardation and Intellectual Development, George Peabody College, Nashville, Tenn., 1972.

Bricker, D. D., & Bricker, W. A. Infant, Toddler and Preschool Research and Intervention Project Report: Year III. IMRID Behavioral Science Monograph No. 23, Institute on Mental Retardation and Intellectual Development, George Peabody College, Nashville, Tenn., 1973.

Bricker, W. A. Identifying and modifying behavioral deficits. American Journal of Mental Deficiency, 1970, 75, 16-21.

Bricker, W. A., & Bricker, D. D. Behavior modification programmes. In P. Mittler (Ed.), Assessment for learning in the mentally handicapped. London: Churchill Livingstone, 1973.

Bricker, W. A., & Bricker, D. D. An early language training strategy. In R. Schiefelbusch & L. Lloyd (Eds.), Language perspectives--acquisition, retardation, and intervention. Baltimore: University

Park Press, 1974.

Caldwell, B. M., & Richmond, J. The Children's Center in Syracuse, New York. In L. Dittman (Ed.), Early child care--The new perspective. New York: Atherton Press, 1968.

Denenberg, V. H. (Ed.), Education of the infant and young child. New York: Academic Press, 1970.

Filler, J. W. Modification of the teaching styles of mothers: The effects of task arrangement on the match-to-sample performance of young retarded children. (Doctoral dissertation, George Peabody College for Teachers) Nashville, Tenn., 1974.

Gilhool, T. K. Education: An inalienable right. Exceptional Children, 1973, Vol. 39, No. 8, 597-609.

Gray, B., & Ryan, B. A language program for the nonlanguage child. Champaign, Ill.: Research Press, 1973.

Haring, N. G., & Schiefelbusch, R. L. (Eds.). Methods in Special Education. New York: McGraw Hill Book Company, 1967.

Highberger, R., & Teets, S. Early Schooling: Why not? A reply to Raymond Moore and Dennis Moore. Young Children, 1974, Vol. 29, No. 2, 66-77.

Hobbs, N. The futures of children: Categories, labels, and their consequences, Report of the Project on Classification of Exceptional Children, in press.

Hodges, W. L., & Spicker, H. H. The effects of preschool experiences on culturally deprived children. In W. W. Hartup & N. L. Smothergill (Eds.), The Young Child: Reviews of Research. Washington, D. C.: NAEYC, 1967.

Honig, A. S. Infant education and stimulation (birth to 3 years): A bibliography. Champaign, Ill.: ERIC Clearinghouse on Early Childhood Education, 1973.

Horton, K. B. Infant intervention and language learning. In R. Schiefelbusch & L. Lloyd (Eds.), Language perspectives--Acquisition, retardation, and intervention. Baltimore: University Park Press, 1974.

Hunt, J. McV. Intelligence and experience. New York: Ronald Press, 1961.

Kirk, S. A. Early education of mentally retarded. Urbana: University of Illinois Press, 1958.

Lovaas, O. I. A program for the establishment of speech in psychotic children. In H. Sloane & B. MacAulay (Eds.), Operant procedures in remedial speech and language training. Boston: Houghton Mifflin Co., 1968.

Olshin, G. S. Model centers for preschool handicapped children--Year II. Exceptional Children, 1971, Vol. 37, No. 9, 665-669.

Piaget, J. Piaget's theory. In P. H. Mussen (Ed.), Carmichael's manual of child psychology. Vol. 1 (3rd ed.) New York: John Wiley, 1970.

Schaefer, E. S. Parents as educators: Evidence from cross-sectional, longitudinal, and intervention research. In W. W. Hartup (Ed.), The Young Child: Reviews of Research, Vol. 2, Washington, D. C.: NAEYC, 1972.

Shearer, M. S., & Shearer, D. E. The Portage Project: A model for early childhood education. Exceptional Children, 1972, Vol. 39, No. 3, 210-17.

Skeels, H. M., & Dye, H. B. A study of the effects of differential stimulation on mentally retarded children. Proceedings and Addresses of the American Association on Mental Deficiency, 1939, 44, 114-136.

Wolfensberger, W. The principle of normalization in human services. Toronto: National Institute on Mental Retardation, 1972.